Chapter 62-340, F.A.C.
Delineation of the Landward Extent of Wetlands and Surface Waters

62-340.100 Intent.

(1) This rule's intent is to provide a unified statewide methodology for the delineation of the extent of wetlands and surface waters to satisfy the mandate of section 373.421, F.S. This delineation methodology is intended to approximate the combined landward extent of wetlands as determined by a water management district and the Department immediately before the effective date of this rule. Before implementing the specific provisions of this methodology, the regulating agency shall attempt to identify wetlands according to the definition for wetlands in subsection 373.019(17), F.S. and subsection 62-340.200(19), F.A.C. below. The landward extent of wetlands shall be determined by the dominance of plant species, soils and other hydrologic evidence indicative of regular and periodic inundation or saturation. In all cases, attempts shall be made to locate the landward extent of wetlands visually by on site inspection, or aerial photointerpretation in combination with ground truthing, without quantitative sampling. If this cannot be accomplished, the quantitative methods in paragraph 62-301.400(1)(c), F.A.C., shall be used unless the applicant or petitioner and regulating agency agree, in writing, on an alternative method for quantitatively analyzing the vegetation on site. The methodology shall not be used to delineate areas which are not wetlands as defined in subsection 62-340.200(19) F.A.C., nor to delineate as wetlands or surface waters areas exempted from delineation by statute or agency rule.

(2) The Department shall be responsible for ensuring statewide coordination and consistency in the delineation of surface waters and wetlands pursuant to this rule, by providing training and guidance to the Department, Districts, and local governments in implementing the methodology.

Specific Authority: 373.421, F.S.
Law Implemented: 373.019, 373.421, F.S.
History: New 7-1-94, Formerly 17-340.100.

62-340.200 Definitions.

When used in this chapter, the following terms shall mean:

(1) "Aquatic plant" means a plant, including the roots, which typically floats on water or requires water for its entire structural support, or which will desiccate outside of water.

(2) "Canopy" means the plant stratum composed of all woody plants and palms with a trunk four inches or greater in diameter at breast height, except vines.

(3) "Diameter at Breast Height (DBH)" means the diameter of a plant's trunk or main stem at a height of 4.5 feet above the ground.

(4) "Facultative plants" means those plant species listed in subsection 62-340.450(3) of this chapter. For the purposes of this rule, facultative plants are not indicators of either wetland or upland conditions.

(5) "Facultative Wet plants" means those plant species listed in subsection 62-340.450(2) of this chapter.

(6) "Ground Cover" means the plant stratum composed of all plants not found in the canopy or subcanopy, except vines and aquatic plants.

(7) "Ground truthing" means verification on the ground of conditions on a site.

(8) "Hydric Soils" means soils that are saturated, flooded, or ponded long enough during the growing season to develop anaerobic conditions in the upper part of the soil profile.

(9) "Hydric Soil Indicators" means those indicators of hydric soil conditions as identified in Soil and Water Relationships of Florida's Ecological Communities (Florida Soil Conservation ed. Staff 1992).

(10) "Inundation" means a condition in which water from any source regularly and periodically covers a land surface.

(11) "Obligate plants" means those plant species listed in subsection 62-340.450(1) of this chapter.

(12) "Regulating agency" means the Department of Environmental Protection, the water management districts, state or regional agencies, local governments, and any other governmental entities.

(13) "Riverwash" means areas of unstabilized sandy, silty, clayey, or gravelly sediments. These areas are flooded, washed, and reworked by rivers or streams so frequently that they may support little or no vegetation.

(14) "Saturation" means a water table six inches or less from the soil surface for soils with a permeability equal to or greater than six inches per hour in all layers within the upper 12 inches, or a water table 12 inches or less from the soil surface for soils with a permeability less than six inches per hour in any layer within the upper 12 inches.

(15) "Seasonal High Water" means the elevation to which the ground and surface water can be expected to rise due to a normal wet season.

(16) "Subcanopy" means the plant stratum composed of all woody plants and palms, exclusive of the canopy, with a trunk or main stem with a DBH between one and four inches, except vines.

(17) "Upland plants" means those plant species, not listed as Obligate, Facultative Wet, or Facultative by this rule, excluding vines, aquatic plants, and any plant species not introduced into the State of Florida as of the effective date of this rule.

(18) "U.S.D.A.-S.C.S." means the United States Department of Agriculture, Soil Conservation Service.

(19) "Wetlands," as defined in subsection 373.019(17), F.S., means those areas that are inundated or saturated by surface water or ground water at a frequency and a duration sufficient to support, and under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soils. Soils present in wetlands generally are classified as hydric or alluvial, or possess characteristics that are associated with reducing soil conditions. The prevalent vegetation in wetlands generally consists of facultative or obligate hydrophytic macrophytes that are typically adapted to areas having soil conditions described above. These species, due to

morphological, physiological, or reproductive adaptations, have the ability to grow, reproduce or persist in aquatic environments or anaerobic soil conditions. Florida wetlands generally include swamps, marshes, bayheads, bogs, cypress domes and strands, sloughs, wet prairies, riverine swamps and marshes, hydric seepage slopes, tidal marshes, mangrove swamps and other similar areas. Florida wetlands generally do not include longleaf or slash pine flatwoods with an understory dominated by saw palmetto.
Specific Authority: 373.421, F.S.
Law Implemented: 373.019, 373.421, F.S.
History: New 7-1-94, Formerly 17-340.200.

62-340.300 Delineation of Wetlands.

The landward extent (i.e., the boundary) of wetlands as defined in subsection 62-340.200(19), F.A.C., shall be determined by applying reasonable scientific judgment to evaluate the dominance of plant species, soils, and other hydrologic evidence of regular and periodic inundation and saturation as set forth below. In applying reasonable scientific judgment, all reliable information shall be evaluated in determining whether the area is a wetland as defined in subsection 62-340.200(19), F.A.C.

(1) Before using the wetland delineation methodology described below, the regulating agency shall attempt to identify and delineate the landward extent of wetlands by direct application of the definition of wetlands in subsection 62-340.200(19), F.A.C., with particular attention to the vegetative communities which the definition lists as wetlands and non-wetlands. If the boundary cannot be located easily by use of the definition in subsection 62-340.200(19), F.A.C., the provisions of this rule shall be used to locate the landward extent of a wetland. In applying the provisions of this rule, the regulating agency shall attempt to locate the landward extent of wetlands visually by on site inspection, or aerial photointerpretation in combination with ground truthing.

(2) The landward extent of a wetland as defined in subsection 62-340.200(19), F.A.C., shall include any of the following areas:

(a) Those areas where the areal extent of obligate plants in the appropriate vegetative stratum is greater than the areal extent of all upland plants in that stratum, as identified using the method in section 62-340.400, F.A.C., and either:

1. the substrate is composed of hydric soils or riverwash, as identified using standard U.S.D.A.-S.C.S. practices for Florida, including the approved hydric soil indicators, except where the hydric soil is disturbed by a nonhydrologic mechanical mixing of the upper soil profile and the regulating agency establishes through data or evidence that hydric soil indicators would be present but for the disturbance;

2. the substrate is nonsoil, rock outcrop-soil complex, or the substrate is located within an artificially created wetland area; or

3. one or more of the hydrologic indicators listed in section 62-340.500, F.A.C., are present and reasonable scientific judgment indicates that inundation or

saturation is present sufficient to meet the wetland definition of subsection 62-340.200(19), F.A.C.

(b) Those areas where the areal extent of obligate or facultative wet plants, or combinations thereof, in the appropriate stratum is equal to or greater than 80% of all the plants in that stratum, excluding facultative plants, and either:

1. the substrate is composed of hydric soils or riverwash, as identified using standard U.S.D.A.-S.C.S. practices for Florida, including the approved hydric soil indicators, except where the hydric soil is disturbed by a nonhydrologic mechanical mixing of the upper soil profile and the regulating agency establishes through data or evidence that hydric soil indicators would be present but for the disturbance;

2. the substrate is nonsoil, rock outcrop-soil complex, or the substrate is located within an artificially created wetland area; or

3. one or more of the hydrologic indicators listed in section 62-340.500, F.A.C., are present and reasonable scientific judgment indicates that inundation or saturation is present sufficient to meet the wetland definition of subsection 62-340.200(19), F.A.C.

(c) Those areas, other than pine flatwoods and improved pastures, with undrained hydric soils which meet, in situ, at least one of the criteria listed below. A hydric soil is considered undrained unless reasonable scientific judgment indicates permanent artificial alterations to the on site hydrology have resulted in conditions which would not support the formation of hydric soils.

1. Soils classified according to United States Department of Agriculture's Keys to Soil Taxonomy (4th ed. 1990) as Umbraqualfs, Sulfaquents, Hydraquents, Humaquepts, Histosols (except Folists), Argiaquolls, or Umbraquults.

2. Saline sands (salt flats-tidal flats).

3. Soil within a hydric mapping unit designated by the U.S.D.A.-S.C.S. as frequently flooded or depressional, when the hydric nature of the soil has been field verified using the U.S.D.A.-S.C.S. approved hydric soil indicators for Florida. If a permit applicant, or a person petitioning for a formal determination pursuant to subsection 373.421(2), F.S., disputes the boundary of a frequently flooded or depressional mapping unit, the applicant or petitioner may request that the regulating agency, in cooperation with the U.S.D.A.-S.C.S., confirm the boundary. For the purposes of subsection 120.60(2), F.S., a request for a boundary confirmation pursuant to this subparagraph shall have the same effect as a timely request for additional information by the regulating agency. The regulating agency's receipt of the final response provided by the U.S.D.A.-S.C.S. to the request for boundary confirmation shall have the same effect as a receipt of timely requested additional information.

4. For the purposes of this paragraph only, "pine flatwoods" means a plant community type in Florida occurring on flat terrain with soils which may experience a seasonal high water table near the surface. The canopy species consist of a monotypic or mixed forest of long leaf pine or slash pine. The subcanopy is typically sparse or absent. The ground cover is dominated by saw palmetto with areas of wire grass,

gallberry, and other shrubs, grasses, and forbs, which are not obligate or facultative wet species. Pine flatwoods do not include those wetland communities as listed in the wetland definition contained in subsection 62-340.200(19), which may occur in the broader landscape setting of pine flatwoods and which may contain slash pine. Also for the purposes of this paragraph only, "improved pasture" means areas where the dominant native plant community has been replaced with planted or natural recruitment of herbaceous species which are not obligate or facultative wet species and which have been actively maintained for livestock through mechanical means or grazing.

(d) Those areas where one or more of the hydrologic indicators listed in section 62-340.500, F.A.C., are present, and which have hydric soils, as identified using the U.S.D.A.-S.C.S. approved hydric soil indicators for Florida, and reasonable scientific judgment indicates that inundation or saturation is present sufficient to meet the wetland definition of subsection 62-340.200(19), F.A.C. These areas shall not extend beyond the seasonal high water elevation.

(3) (a) If the vegetation or soils of an upland or wetland area have been altered by natural or man-induced factors such that the boundary between wetlands and uplands cannot be delineated reliably by use of the methodology in subsection 62-340.300(2), F.A.C., as determined by the regulating agency, and the area has hydric soils or riverwash, as identified using standard U.S.D.A.-S.C.S. practices for Florida, including the approved hydric soil indicators, except where the hydric soil is disturbed by a non hydrologic mechanical mixing of the upper soil profile and the regulating agency establishes through data or evidence that hydric soil indicators would be present but for the disturbance, then the most reliable available information shall be used with reasonable scientific judgement to determine where the methodology in subsection 62-340.300(2), F.A.C., would have delineated the boundary between wetlands and uplands. Reliable available information may include, but is not limited to, aerial photographs, remaining vegetation, authoritative site-specific documents, or topographical consistencies.

(b) This subsection shall not apply to any area where regional or site-specific permitted activity, or activities which did not require a permit, under sections 253.123 and 253.124, F.S. (1957), as subsequently amended, the provisions of Chapter 403, F.S. (1983), relating to dredging and filling activities, Chapter 84-79, Laws of Florida, and Part IV of Chapter 373, F.S., have altered the hydrology of the area to the extent that reasonable scientific judgment, or application of the provisions of section 62-340.550, F.A.C., indicate that under normal circumstances the area no longer inundates or saturates at a frequency and duration sufficient to meet the wetland definition in subsection 62-340.200(19), F.A.C.

(c) This subsection shall not be construed to limit the type of evidence which may be used to delineate the landward extent of a wetland under this chapter when an activity violating the regulatory requirements of sections 253.123 and 253.124, F.S. (1957), as subsequently amended, the provisions of Chapter 403, F.S. (1983), relating

to dredging and filling activities, Chapter 84-79, Laws of Florida, and Part IV of Chapter 373, F.S., has disturbed the vegetation or soils of an area.

(4) The regulating agency shall maintain sufficient soil scientists on staff to provide evaluation or consultation regarding soil determinations in applying the methodologies set forth in subsections 62-340.300(2) or (3), F.A.C. Services provided by the U.S.D.A.-S.C.S., or other competent soil scientists, under contract or agreement with the regulating agency, may be used in lieu of, or to augment, agency staff.

Specific Authority: 373.421, F.S.
Law Implemented: 373.019, 373.421, F.S.
History: New 7-1-94, Formerly 17-340.300.

62-340.400 Selection of Appropriate Vegetative Stratum.

Dominance of plant species, as described in paragraphs 62-340.300(2)(a) and 62-340.300(2)(b), shall be determined in a plant stratum (canopy, subcanopy, or ground cover). The top stratum shall be used to determine dominance unless the top stratum, exclusive of facultative plants, constitutes less than 10 percent areal extent, or unless reasonable scientific judgment establishes that the indicator status of the top stratum is not indicative of the hydrologic conditions on site. In such cases, the stratum most indicative of on site hydrologic conditions, considering the seasonal variability in the amount and distribution of rainfall, shall be used. The evidence concerning the presence or absence of regular and periodic inundation or saturation shall be based on in situ data. All facts and factors relating to the presence or absence of regular and periodic inundation or saturation shall be weighed in deciding whether the evidence supports shifting to a lower stratum. The presence of obligate, facultative wet, or upland plants in a lower stratum does not by itself constitute sufficient evidence to shift strata, but can be considered along with other physical data in establishing the weight of evidence necessary to shift to a lower stratum. The burden of proof shall be with the party asserting that a stratum other than the top stratum should be used to determine dominance. Facultative plants shall not be considered for purposes of determining appropriate strata or dominance.

Specific Authority: 373.421, F.S.
Law Implemented: 373.019, 373.421, F.S.
History: New 7-1-94, Formerly 17-340.400.

62-340.450 Vegetative Index.

(1) Obligate Species

Acer saccharinum	maple, silver
Acoelorraphe wrightii	palm, paurotis
Acrostichum spp.	leather fern
Aeschynomene pratensis	joint-vetch, meadow
Agalinis linifolia	false-foxglove, flax-leaf

Agalinis maritima	false-foxglove, saltmarsh
Alisma subcordatum	water-plantain, subcordate
Alnus serrulata	alder, hazel
Alternanthera philoxeroides	alligator-weed
Alternanthera sessilis	alligator weed, sessile
Amaranthus australis	amaranth, southern
Amaranthus cannabinus	amaranth, tidemarsh
Amaranthus floridanus	amaranth, Florida
Ammannia spp.	toothcup
Annona glabra	pond apple
Aristida affinis	three-awn grass, long-leaf
Armoracia aquatica	lakecress
Arnoglossum sulcatum	indian-plantain, Georgia
Asclepias incarnata	milkweed, swamp
Asclepias lanceolata	milkweed, fen-flower
Asclepias perennis	milkweed, aquatic
Asclepias rubra	milkweed, red
Aster carolinianus	aster, climbing
Aster elliottii	aster, Elliott's
Aster subulatus	aster, saltmarsh
Aster tenuifolius	aster, saltmarsh
Avicennia germinans	mangrove, black
Baccharis angustifolia	false-willow
Bacopa spp.	water-hyssop
Batis maritima	saltwort
Bidens spp.	beggar-ticks
except Bidens pilosa	beggar-ticks, white (FAC
Bidens bipinnata	Spanish needles (U)
Boehmeria cylindrica	false-nettle, small-spike
Borrichia spp.	sea oxeye
Burmannia spp.	burmannia
Callitriche spp.	water-starwort
Campanula floridana	bellflower
Canna spp.	canna
except Canna x generalis	canna, common (FAC)
Cardamine bulbosa	bitter-cress
Cardamine pensylvanica	spring-cress
Carex atlantica	sedge, prickly bog
Carex comosa	sedge, bearded
Carex crinita	sedge, fringed
Carex crus-corvi	sedge, raven-foot
Carex decomposita	sedge, cypress-knee

Carex elliottii	sedge, Elliott's
Carex folliculata	sedge, long
Carex gigantea	sedge, large
Carex howei	sedge, Howe's
Carex hyalinolepis	sedge, shoreline
Carex leptalea	sedge, bristly-stalk
Carex louisianica	sedge, Louisiana
Carex lupulina	sedge, hop
Carex lurida	sedge, shallow
Carex stipata	sedge, stalk-grain
Carex walteriana	sedge, Walter's
Carya aquatica	hickory, water
Cephalanthus occidentalis	buttonbush
Chamaecyparis thyoides	cedar, Atlantic white
Cicuta spp.	water-hemlock
Cirsium muticum	thistle, swamp
Cladium spp.	sawgrass
Cleistes divaricata	rosebud
Colocasia esculenta	elephant's ear
Coreopsis nudata	tickseed, Georgia
Cornus amomum	dogwood, silky
Crataegus aestivalis	mayhaw
Crinum americanum	swamp-lily, southern
Cyperus alternifolius	flatsedge, alternate-leaf
Cyperus articulatus	flatsedge, jointed
Cyperus difformis	flatsedge, variable
Cyperus distinctus	flatsedge, marshland
Cyperus drummondii	flatsedge
Cyperus entrerianus	flatsedge
Cyperus erythrorhizos	flatsedge, red-root
Cyperus haspan	flatsedge, sheathed
Cyperus lanceolatus	flatsedge, epiphytic
Cyperus papyrus	flatsedge, papyrus
Decodon verticillatus	swamp-loosestrife
Dichromena latifolia	white-top sedge, giant
Distichlis spicata	saltgrass, seashore
Drosera filiformis	sundew, thread-leaf
Drosera intermedia	sundew, spoon-leaf
Drosera tracyi	sundew, Gulf coast
Dulichium arundinaceum	sedge, three-way
Echinodorus spp.	burhead
Eleocharis spp.	spikerush

Erianthus giganteus	plumegrass, sugarcane
Erianthus strictus	plumegrass, narrow
Eriocaulon spp.	pipewort
Eryngium aquaticum	corn snakeroot
Eupatorium leptophyllum	marsh thoroughwort
Fimbristylis spp.	fringe-rush
except Fimbristylis annua	fringe-rush, annual (FACW)
F. puberula	fringe-rush, Vahl's (FACW)
F. spathacea	hurricane-grass (FAC)
Fraxinus spp.	ash
except Fraxinus americana	ash, white (U)
Fuirena spp.	umbrella-sedge
Gleditsia aquatica	water-locust
Glyceria striata	fowl mannagrass
Heteranthera reniformis	mud-plantain, kidney-leaf
Hibiscus coccineus	rosemallow, scarlet
Hibiscus grandiflorus	rosemallow, swamp
Hibiscus laevis	rosemallow, halberd-leaf
Hibiscus moscheutos	rosemallow, swamp
Hydrochloa caroliniensis	watergrass
Hydrocleis nymphoides	water-poppy
Hydrocotyle ranunculoides	penny-wort, floating
Hydrolea spp.	false-fiddle-leaf
Hygrophila spp.	hygrophila
Hymenachne amplexicaulis	trompetilla
Hymenocallis spp.	spider-lily
Hypericum chapmanii	St. John's-wort, Chapman's
Hypericum edisonianum	St. John's-wort, Edison's
Hypericum fasciculatum	St. John's-wort, marsh
Hypericum lissophloeus	St. John's-wort, smooth-bark
Hypericum nitidum	St. John's-wort, Carolina
Ilex amelanchier	holly, sarvis
Ilex cassine	holly, dahoon
Ilex myrtifolia	holly, myrtle
Ilex verticillata	winterberry
Illicium floridanum	anise, Florida
Impatiens capensis	touch-me-not, spotted
Iris spp.	iris
except I. verna	dwarf iris(U)
Isoetes spp.	quillwort
Itea virginica	virginia willow
Iva frutescens	marsh elder

Juncus spp.	rush
except J. tenuis	rush(FAC)
J. marginatus	rush(FACW)
Justicia spp.	water-willow
except J. brandegeana	shrimp plant (U)
Kosteletzkya virginica	mallow, seashore
Lachnocaulon digynum	bogbutton, pineland
Lachnocaulon engleri	bogbutton, Engler's
Lachnocaulon minus	bogbutton, Small's
Laguncularia racemosa	mangrove, white
Leersia spp.	cutgrass
Leitneria floridana	corkwood
Lilaeopsis spp.	lilaeopsis
Lilium iridollae	lily, panhandle
Limnobium spongia	frogbit
Limnophila spp.	marshweed
Limonium carolinianum	sea-lavender
Lindera melissaefolia	spicebush, southern
Linum westii	flax, West's
Liparis elata = (L. nervosa)	liparis, tall
Litsea aestivalis	pondspice
Lobelia cardinalis	cardinal flower
Lobelia floridana	lobelia, Florida
Ludwigia spp.	ludwigia; water-primrose
exceptLudwigia hirtella	seedbox, hairy (FACW)
Ludwigia maritima	seedbox, seaside (FACW)
L. suffruticosa	seedbox, headed (FACW)
Ludwigia virgata	seedbox, savanna (FACW)
Lycium carolinianum	Christmas berry
Lycopus spp.	bugleweed
Lysimachia spp.	loosestrife
Lythrum spp.	marsh loosestrife
Macranthera flammea	flameflower
Magnolia virginiana var. australis	magnolia, sweetbay
Malaxis spicata	adder's-mouth, Florida
Maxillaria crassifolia	orchid, hidden
Melanthium virginicum	bunchflower, Virginia
Micranthemum spp.	baby tears
Micromeria brownei	savory, Brown's
Mimulus alatus	monkey-flower
Monanthochloe littoralis	keygrass

Muhlenbergia capillaris	muhly grass
Nasturtium spp.	water-cress
Nelumbo spp.	water-lotus
Nuphar luteum	cow-lily, yellow
Nymphaea spp.	water-lily
Nymphoides spp.	floating-hearts
Nyssa aquatica	tupelo, water
Nyssa ogeche	tupelo, ogeechee
Nyssa sylvatica var. biflora	tupelo, swamp
Orontium aquaticum	golden club
Osmunda regalis	fern, royal
Oxypolis spp.	water drop-wort
Panicum ensifolium	panic grass
Panicum erectifolium	witchgrass, erect-leaf
Panicum gymnocarpon	panicum, savannah
Panicum hemitomon	maidencane
Panicum longifolium	panicum, tall thin
Panicum scabriusculum	panicum, woolly
Panicum tenerum	panicum, bluejoint
Parnassia spp.	grass-of-parnassus
Paspalidium geminatum	water panicum
Paspalum dissectum	paspalum, mudbank
Paspalum distichum	paspalum, joint
Paspalum monostachyum	paspalum, gulf
Paspalum praecox	paspalum, early
Paspalum repens	paspalum, water
Peltandra spp.	arum; spoon flower
Penthorum sedoides	ditch stonecrop
Pentodon pentandrus	pentodon, Hall's
Persea palustris	bay, swamp
Phragmites australis	reed, common
Physostegia godfreyi	dragon-head, Godfrey's
Physostegia leptophylla	dragon-head, slender-leaf
Pinckneya bracteata	fever-tree
Pinguicula spp.	butterwort
Planera aquatica	planer tree
Platanthera spp.	orchid, fringed
Pleea tenuifolia	rush-featherling
Pogonia ophioglossoides	pogonia, rose
Polygala cymosa	milkwort, tall
Polygonum spp.	smartweed
except P. argyrocoleon	smartweed, silversheath (U)

Effective 7-1-94

P. virginianum	jumpseed (FACW)
Pontederia cordata	pickerelweed
Populus heterophylla	cottonwood, swamp
Proserpinaca spp.	mermaid-weed
Psilocarya spp.	baldrush
Quercus lyrata	oak, overcup
Rhexia parviflora	meadow-beauty, white
Rhexia salicifolia	meadow-beauty, panhandle
Rhizophora mangle	mangrove, red
Rhynchospora cephalantha	beakrush, clustered
Rhynchospora chapmanii	beakrush, Chapman's
Rhynchospora corniculata	beakrush, short-bristle
Rhynchospora decurrens	beakrush, swamp-forest
Rhynchospora divergens	beakrush, spreading
Rhynchospora harperi	beakrush, Harper's
Rhynchospora inundata	beakrush, horned
Rhynchospora macra	beakrush, large
Rhynchospora microcarpa	beakrush, southern
Rhynchospora miliacea	beakrush, millet
Rhynchospora mixta	beakrush, mingled
Rhynchospora oligantha	beakrush, few-flower
Rhynchospora stenophylla	beakrush, Chapman's
Rhynchospora tracyi	beakrush, Tracy's
Rorippa spp.	yellow-cress
Rosa palustris	rose, swamp
Rotala ramosior	toothcup
Rudbeckia mohrii	coneflower, Mohr's
Sabatia bartramii	rose-gentian, Bartram's
Sabatia calycina	rose-gentian, coast
Sabatia dodecandra	rose-gentian, large
Sacciolepis striata	cupscale, American
Sagittaria spp.	arrowhead
Salicornia spp.	glasswort
Salix spp.	willow
Samolus spp.	pimpernel, water
Sarracenia spp.	pitcher-plant
except Sarracenia minor	pitcher-plant, hooded (FACW)
Saururus cernuus	lizard's tail
Scirpus spp.	bulrush
Scutellaria lateriflora	skullcap, blue
Scutellaria racemosa	skullcap
Senecio aureus	ragwort, golden

Senecio glabellus	butterweed
Setaria magna	foxtail
Sium suave	water-parsnip
Solidago elliottii	golden-rod, Elliott's
Solidago patula	golden-rod, rough-leaf
Sparganium americanum	burreed
Spartina alterniflora	cordgrass, saltmarsh
Spartina cynosuroides	cordgrass, big
Spartina spartinae	cordgrass, gulf
Spergularia marina	sandspurry, saltmarsh
Sphagnum spp.	sphagnum moss
Sphenopholis pensylvanica	wedgescale, swamp
Sporobolus virginicus	dropseed, seashore
Stachys lythroides	hedgenettle
Stillingia aquatica	corkwood
Styrax americana	snowbell; storax
Suaeda spp.	sea-blite
Taxodium ascendens	cypress, pond
Taxodium distichum	cypress, bald
Thalia geniculata	thalia; fire flag
Tofieldia racemosa	false-asphodel, coastal
Triadenum spp.	St. John's-wort, marsh
Triglochin striatam	arrow-grass
Typha spp.	cattail
Utricularia spp.	bladderwort
Veronica anagallis-aquatica	speedwell, water
Vicia ocalensis	vetch, Ocala
Viola lanceolata	violet, lance-leaf
Websteria confervoides	water-meal
Woodwardia aereolata	chainfern
Xyris spp.	yellow-eyed grass
except Xyris caroliniana	yellow-eyed grass, Carolina(FACW)
Xyris jupicai	yellow-eyed grass, tropical (FACW)
Zizania aquatica	wildrice
Zizaniopsis miliacea	wildrice, southern

(2) Facultative Wet Species

Abildgaardia ovata	rush, flat-spike
Acer negundo	box-elder

Acer rubrum	maple, red
Aeschynomene indica	joint-vetch, India
Agalinis aphylla	false-foxglove, scale-leaf
Agalinis pinetorum (= A. pulchella)	false-foxglove
Agalinis purpurea	false-foxglove, large purple
Agarista populifolia	hobble-bush
Agrostis stolonifera	redtop
Amorpha fruticosa	indigo-bush
Amphicarpum muhlenbergianum	blue maidencane
Amsonia rigida	slimpod, stiff
Amsonia tabernaemontana	slimpod, eastern
Andropogon glomeratus (Campbell)	bluestem, bushy
Andropogon liebmanii var. pungensis (Campbell) (A. mohrii)	bluestem, Mohr's
Anthaenantia rufa	silky-scale, purple
Apteria aphylla	nodding nixie
Arenaria godfreyi	stitchwort, Godfrey's
Arisaema spp.	jack-in-the-pulpit; green-dragon
Aristida purpurascens (s.l.)	three-awn grass, wand-like
Arnoglossum diversifolium	indian-plantain, variable-leaf
Arnoglossum ovatum	indian-plantain, egg-leaf
Aronia arbutifolia	red chokeberry
Arundinaria gigantea	giant cane
Asclepias connivens	milkweed, large-flower
Asclepias longifolia	milkweed, long-leaf
Asclepias pedicellata	milkweed, savannah
Asclepias viridula	milkweed, southern
Aster chapmanii	aster, savannah
Aster eryngiifolius	aster, coyote-thistle
Aster lateriflorus	aster, calico
Aster spinulosus	aster, bog
Aster vimineus	aster, small white
Athyrium filix-femina	fern, subarctic lady
Atriplex patula	saltbush, halberd-leaf
Balduina atropurpurea	honeycomb-head, purple
Balduina uniflora	honeycomb-head, one-flower
Bartonia spp.	screwstem
Bigelowia nudata	golden-rod, rayless

Blechnum serrulatum	swamp fern
Boltonia spp. boltonia	
Brachiaria purpurascens	paragrass
Cacalia suaveolens	indian-plantain, sweet-scent
Calamovilfa curtissii	Curtiss' reed grass
Calopogon spp.	grass-pinks
Calycocarpum lyonii	cupseed
Caperonia spp.	caperonia
Capparis flexuosa	caper-tree
Carex spp.	sedges
except Carex atlantica	sedge, prickly bog (OBL)
Carex comosa	sedge, bearded (OBL)
Carex crinita	sedge, fringed (OBL)
Carex crus-corvi	sedge, raven-foot (OBL)
Carex decomposita	sedge, cypress-knee (OBL)
Carex elliottii	sedge, Elliott's (OBL)
Carex folliculata	sedge, long (OBL)
Carex gigantea	sedge, large (OBL)
Carex howei	sedge, Howe's (OBL)
Carex hyalinolepis	sedge, shoreline (OBL)
Carex leptalea	sedge, bristly-stalk (OBL)
Carex louisianica	sedge, Louisiana (OBL)
Carex lupulina	sedge, hop (OBL)
Carex lurida	sedge, shallow (OBL)
Carex stipata	sedge, stalk-grain (OBL)
Carex walteriana	sedge, Walter's (OBL)
Carphephorus carnosus	chaffhead, pineland
Carphephorus pseudoliatris	chaffhead, bristle-leaf
Carpinus caroliniana	hornbeam, American
Celtis laevigata	sugar-berry; hackberry
Centella asiatica	coinwort
Chaptalia tomentosa	sunbonnet; pineland daisy
Chasmanthium spp.	spanglegrass
except C. latifolum	
C. sessiliflorum	longleaf Chasmanthium
Chrysobalanus icaco	cocoplum
Cirsium lecontei	thistle, Leconte's
Cirsium nuttallii	thistle, Nuttall's
Clethra alnifolia	sweet pepper bush
Cliftonia monophylla	buckwheat-tree
Commelina spp.	dayflower
except Commelina erecta	dayflower, sandhill (U)

Conocarpus erectus	buttonwood
Coreopsis falcata	tickseed, sickle
Coreopsis floridana	tickseed, Florida
Coreopsis gladiata	tickseed, southeastern
Coreopsis integrifolia	tickseed, ciliate-leaf
Coreopsis leavenworthii	tickseed, Leavenworth's
Coreopsis linifolia	tickseed, Texas
Cornus foemina	swamp dogwood
Crataegus marshallii	haw, parsley
Crataegus viridis	haw, green
Croton elliottii	croton, Elliott's
Ctenitis submarginalis	fern, brown-hair comb
Ctenium spp.	toothache grass
Cuphea aspera	common waxweed
Cyperus spp.	flatsedge
except C. alternifolius	flatsedge, alternate-leaf (OBl)
Cyperus articulatus	flatsedge, jointed (OBL)
Cyperus difformis	flatsedge, variable (OBL)
Cyperus distinctus	flatsedge, marshland (OBL)
Cyperus drummondii	flatsedge (OBL)
Cyperus entrerianus	flatsedge (OBL)
C. erythrorhizos	flatsedge, red-root (OBL)
Cyperus haspan	flatsedge, sheathed (OBL)
Cyperus lanceolatus	flatsedge, epiphytic (OBL)
Cyperus papyrus	flatsedge, papyrus (OBL)
Cyperus cuspidatus	flatsedge, coastal-plain (FAC)
Cyperus esculentus	flatsedge (FAC)
Cyperus giganteus	flatsedge (FAC)
Cyperus globulosus	flatsedge, baldwin (FAC)
Cyperus huarmensis	flatsedge, black knotty-root (FAC)
Cyperus metzii	flatsedge (FAC)
Cyperus retrorsus	flatsedge (FAC)
Cyperus rotundus	flatsedge, purple (FAC)
Cyperus filiculmis	flatsedge, sandhill (U)
Cyperus ovularis	flatsedge (U)
Cyperus reflexus	flatsedge (U)
Cyperus refractus	flatsedge (U)
C. retrofractus	flatsedge (U)
Cyperus tetragonus	flatsedge (U)
Dichromena colorata	white-top sedge, starbrush
Dichromena floridensis	white-top sedge, Everglades

Dicliptera brachiata	mudwort, wild
Digitaria pauciflora	everglades grass
Diodia virginiana	button-weed
Dionaea muscipula	Venus' flytrap
Drosera brevifolia	sundew, dwarf
Drosera capillaris	sundew, pink
Dryopteris ludoviciana	shield-fern, southern
Dyschoriste humistrata	dyschoriste, swamp
Echinochloa spp.	jungle-rice; cockspur grass
Eclipta alba	yerba de Tajo
Elyonurus tripsacoides	balsam-scale, Pan-American
Equisetum hyemale	horsetail
Erianthus brevibarbus	plume grass, short-beard
Erigeron vernus	fleabane, early whitetop
Eriochloa spp.	cupgrass
Eryngium integrifolium	coyote-thistle, blue-flower
Eryngium prostratum	coyote-thistle, creeping
Eryngium yuccifolium	rattlesnake master
Erythrodes querceticola	erythrodes, low
Eulophia alta	coco, wild
Eupatoriadelphus fistulosus	joe-pye-weed
Eupatorium leucolepis	thoroughwort, white-bract
Eupatorium mikanioides	thoroughwort, semaphore
Eupatorium perfoliatum	boneset
Euphorbia humistrata (=Chamaesyce humistrata)	broomspurge, spreading
Euphorbia inundata	spurge, Florida
Euphorbia polyphylla	spurge, many-leaved
Eustachys glauca (=Chloris glauca)	fingergrass, saltmarsh
Eustoma exaltatum	prairie-gentian
Evolvulus convolvuloides	evolvulus
Evolvulus sericeus	silky bindweed
Fimbristylis annua	fimbry, annual
Fimbristylis puberula	fimbry, Vahl's hairy
Flaveria floridana	yellowtop
Flaveria linearis	yellowtop
Forestiera acuminata	privet, swamp
Fothergilla gardenii	witch-alder, dwarf
Galium tinctorium	bedstraw, stiff marsh
Gaylussacia mosieri	woolly-berry
Gentiana spp.	gentian

Gleditsia triacanthos	honey-locust
Gordonia lasianthus	bay, loblolly
Gratiola spp.	hedgehyssop
except Gratiola hispida	hedgehyssop (FAC)
Habenaria spp.	rein orchid
Halesia diptera	silver-bell
Harperocallis flava	Harper's beauty
Hartwrightia floridana	hartwrightia, Florida
Hedychium coronarium	ginger
Helenium spp.	sneezeweed
except Helenium amarum	sneezeweed, pasture (FAC)
Helianthus agrestis	sunflower, southeastern
Helianthus angustifolius	sunflower, swamp
Helianthus carnosus	sunflower, lakeside
Helianthus heterophyllus	sunflower, wetland
Helianthus simulans	sunflower, muck
Heliotropium procumbens	heliotrope, four-spike
Hemicarpha spp.	dwarf-bullrush
Hibiscus aculeatus	rosemallow
Hydrocotyle spp.	pennywort
except H. ranunculoides	pennywort, floating (OBL)
Hypericum spp.	St. John's-wort
except Hypericum chapmanii	St. John's-wort, Chapman's(OBL)
H. edisonianum	St. John's-wort, Edison's (OBL)
H. fasciculatum	St. John's-wort, marsh (OBL)
H. lissophloeus	St. John's-wort,
smooth-bark (OBL)	
Hypericum nitidum	St. John's-wort, Carolina(OBL)
H. hypericoides	St. Andrew's cross (FAC)
H. tetrapetalum	St.John's-wort, four-petal(FAC)
H. cumulicola	St. John's-wort, scrub (U)
H. drummondii	St. John's-wort, Drummond's(U)
H. gentianoides	pineweed (U)
H. microsepalum	St. John's-wort, small-sepal(U)
H. prolificum	St. John's-wort, shrubby (U)
Hypericum punctatum	St. John's-wort, dotted (U)
Hypericum reductum	St. John's-wort, Atlantic (U)
Hypolepis repens	fern, bead
Hypoxis spp.	stargrasses, yellow
Hyptis alata	musky mint
Ilex coriacea	holly, bay-gall
Ilex decidua	holly, deciduous

Illicium parviflorum	star anise
Iva microcephala	little marsh elder
Juncus marginatus	shore rush
Kalmia latifolia	laurel, mountain
Lachnocaulon anceps	bogbutton, white-head
Lachnocaulon beyrichianum	bogbutton, southern
Laportea canadensis	wood-nettle, Canada
Leptochloa spp.	sprangle-top
except Leptochloa virgata	sprangle-top, tropic (FAC)
Leucothoe spp.	dog-hobble
Liatris garberi	gayfeather, garber's
Lindera benzoin	spicebush, northern
Lindernia spp.	false-pimpernel
except Lindernia crustacea	false-pimpernel, Malayan (FAC)
Linum carter	flax, Carter's
Linum striatum	flax, ridged yellow
Lipocarpha spp.	lipocarpha
Liquidambar styraciflua	sweetgum
Liriodendron tulipifera	tulip tree
Listera spp.	twayblade
Lobelia spp.	lobelia
except Lobelia cardinalis	flower, cardinal (OBL)
Lobelia floridana	lobelia, Florida (OBL)
Lophiola americana	golden-crest
Ludwigia hirtella	seedbox, hairy
Ludwigia maritima	seedbox, seaside
Ludwigia suffruticosa	seedbox, headed
Ludwigia virgata	seedbox, savanna
Lycopodium spp.	clubmoss
Lyonia lucida	fetter-bush
Lyonia mariana	fetter-bush
Macbridea spp.	birds-in-a-nest
Manisuris spp.	jointgrass
except M. cylindrica	jointgrass, pitted (FAC)
Marshallia graminifolia	barbara's-buttons, grass-leaf
Marshallia tenuifolia	barbara's-buttons, slim-leaf
Mecardonia spp.	mecardonia
Melanthera nivea	squarestem,
Mitreola spp.	hornpod
Muhlenbergia schreberi	nimblewill
Myrica heterophylla	bayberry, evergreen
Myrica inodora	bayberry, odorless

Nemastylis floridana	pleatleaf, fall-flowering
Nemophila aphylla	baby-blue-eyes, small-flower
Oldenlandia spp.	bluets, water
Onoclea sensibilis	fern, sensitive
Osmunda cinnamomea	fern, cinnamon
Panicum abscissum (Hall)	cut-throat grass
Panicum dichotomiflorum	panicum, fall
Panicum dichotomum	panicum
Panicum pinetorum	panicum
Panicum repens	grass, torpedo
Panicum rigidulum	panicum, red-top
Panicum scoparium	panicum
Panicum spretum	panicum
Panicum verrucosum	panicum, warty
Panicum virgatum	switchgrass
Paspalum acuminatum	paspalum, brook
Paspalum boscianum	paspalum, bull
Paspalum floridanum	paspalum, Florida
Paspalum laeve	paspalum, field
Paspalum pubiflorum	paspalum, hairy-seed
Pavonia spicata	mangrove mallow
Philoxerus vermicularis	silverhead
Phyllanthus caroliniensis	leaf-flower, Carolina
Phyllanthus liebmannianus	leaf-flower, Florida
Physostegia purpurea	dragon-head, purple
Physostegia virginiana	dragon-head, false
Pieris phillyreifolia	fetter-bush, climbing
Pilea spp.	clearweed
Pinus glabra	pine, spruce
Pinus serotina	pine, pond
Platanus occidentalis	sycamore
Pluchea spp.	camphor-weed
Polygala spp.	milkwort
except Polygala cymosa	milkwort, tall yellow (OBL)
P. leptostachys	milkwort, sandhill (U)
Polygala lewtonii	milkwort, scrub (U)
Polygala polygama	milkwort, racemed (U)
P. verticillata	milkwort, whorled (U)
Polygonum virginianum	jumpseed
Ponthieva racemosa	shadow-witch
Populus deltoides	cotton-wood, eastern
Pteris tripartita	brake, giant

Ptilimnium capillaceum	mock bishop-weed
Pycnanthemum nudum	mountain-mint, coastal-plain
Quercus michauxii	oak, swamp chestnut
Quercus nigra	oak, water
Quercus pagoda	oak, cherry-bark
Quercus phellos	oak, willow
Ranunculus spp.	butter-cup
Reimarochloa oligostachya	grass, Florida reimar
Rhapidophyllum hystrix	palm, needle
Rhexia spp.	meadow-beauty
except Rhexia parviflora	meadow-beauty, white (OBL)
Rhexia salicifolia	meadow-beauty,panhandle(OBL)
Rhododendron viscosum	azalea, swamp
Rhynchospora spp.	beakrush
except R. cephalantha	beakrush, clustered (OBL)
R. chapmanii	beakrush, Chapman's (OBL)
R. corniculata	beakrush, short-bristle (OBL)
R. decurrens	beakrush, swamp-forest (OBL)
R. divergens	beakrush, spreading (OBL)
R. harperi	beakrush, Harper's (OBL)
R. inundata	beakrush, horned (OBL)
Rhynchospora macra	beakrush, large (OBL)
R. microcarpa	beakrush, southern (OBL)
R. miliacea	beakrush, millet (OBL)
Rhynchospora mixta	beakrush, mingled (OBL)
R. oligantha	beakrush, few-flower (OBL)
R. stenophylla	beakrush, Chapman's (OBL)
Rhynchospora tracyi	beakrush, Tracy's (OBL)
Rhynchospora grayi	beakrush, Gray's (U)
R. intermedia	beakrush, pinebarren (U)
R. megalocarpa	beakrush, giant-fruited (U)
Roystonea spp.	palm, royal
Rudbeckia fulgida	coneflower, orange
Rudbeckia graminifolia	coneflower, grass-leaf
Rudbeckia laciniata	coneflower, cut-leaf
Rudbeckia nitida	coneflower, shiny
Sabal minor	palmetto, dwarf
Sabatia spp.	rose-gentian
except Sabatia bartramii	rose-gentian, Bartram's (OBL)
Sabatia calycina	rose-gentian, coast (OBL)
Sabatia dodecandra	rose-gentian, large (OBL)
Sachsia polycephala	sachsia

Sarracenia minor	pitcher-plant, hooded
Schoenolirion croceum	sunny bells
Schoenolirion elliottii	sunny bells
Schoenus nigricans	black-sedge
Scleria spp.	nutrush
Sclerolepis uniflora	hardscale, one flower
Selaginella apoda	spike-moss, meadow
Sesuvium spp.	sea-purslane
Sisyrinchium atlanticum	blue-eye-grass, eastern
Sisyrinchium capillare	blue-eye-grass
Sisyrinchium mucronatum	blue-eye-grass, Michaux's
Solanum bahamense	canker-berry
Solanum erianthum	night-shade, shrub
Solidago fistulosa	golden-rod, marsh
Solidago leavenworthii	golden-rod, leavenworth's
Solidago sempervirens	golden-rod, seaside
Solidago stricta	golden-rod, willow-leaf
Sophora tomentosa	coast sophora
Spartina bakeri	cordgrass, sand
Spartina patens	cordgrass, saltmeadow
Spermacoce glabra	button-plant, smooth
Sphenoclea zeylandica	chicken-spike
Sphenostigma coelestinum	ixia, Bartram's
Spilanthes americana	spotflower, creeping
Spiranthes spp.	ladies'-tresses
Sporobolus floridanus	dropseed, Florida
Staphylea trifolia	bladdernut, American
Stenandrium floridanum	stenandrium
Stenanthium gramineum	feather-bells, eastern
Stipa avenacioides	grass, Florida needle
Stokesia laevis	stokesia
Syngonanthus flavidulus	bantam-buttons
Teucrium canadense	germander, American
Thalictrum spp.	meadow-rue
Thelypteris spp.	shield fern
Tilia americana	American basswood
Toxicodendron vernix	poison sumac
Trachelospermum difforme	climbing-dogbane
Trepocarpus aethusae	trepocarpus, aethusa-like
Trianthema portulacastrum	horse-purslane
Tridens ambiguus	tridens, savannah
Tridens strictus	tridens, long-spike

Triphora spp.	pogonias, nodding
Ulmus spp.	elm
except Ulmus rubra	elm, slippery (U)
Urechites lutea	allamanda, wild
Uvularia floridana	bellwort, Florida
Vaccinium corymbosum	blueberry, highbush
Verbena scabra	vervain, sandpaper
Verbesina chapmanii	crownbeard, Chapman's
Verbesina heterophylla	crownbeard, diverse-leaf
Vernonia spp.	ironweed
except V. angustifolia	ironweed, narrow-leaf (U)
Veronicastrum virginicum	culver's root
Viburnum dentatum	arrow-wood
Viburnum nudum	viburnum, possum-haw
Viburnum obovatum	viburnum, walter
Vicia acutifolia	vetch, four-leaf
Vicia floridana	vetch, Florida
Viola affinis	violet, Leconte's
Viola primulifolia	violet, primrose-leaf
Woodwardia virginica	chainfern
Xanthorhiza simplicissima	yellow-root, shrubby
Xanthosoma sagittifolium	elephant ear
Xyris caroliniana	yellow-eyed-grass, Carolina
Xyris jupicai	yellow-eyed-grass, Richard's
Yeatesia viridiflora	yeatesia, green-flower
Zephyranthes atamasco	lily, atamasco
Zigadenus densus	crow poison
Zigadenus glaberrimus	deathcamas, Atlantic

Within Monroe County and the Key Largo portion of Dade County only, the following species shall be listed as Facultative Wet:

Alternanthera maritima	beach alternanthera
Morinda royoc	Keys rhubarb
Strumpfia maritima	strumpia

(3) Facultative Species

Acacia auriculiformis	ear-leaved acacia
Aletris spp. colic-root	
Alopecurus carolinianus	foxtail, tufted
Anagallis pumila	pimpernel, Florida

Andropogon arctatus (Campbell)	bluestem, savannah
Andropogon brachystachys (Campbell)	bluestem,short-spike
Andropogon gerardii (Campbell)	bluestem, big
Andropogon perangustatus (Campbell)	bluestem, slim
Andropogon virginicus (Campbell)	broom-sedge
Ardisia spp.	marlberry
Aristida rhizomophora three-awn	grass, rhizomatous
Aristida spiciformis	bottlebrush, three-awn
Aristida stricta	grass, pineland three-awn
Aster dumosus	aster, bushy
Aster umbellatus	aster, flat-top white
Axonopus spp.	carpet grass
Baccharis dioica	false-willow, broom-bush
Baccharis glomeruliflora	groundsel tree
Baccharis halimifolia	false-willow, eastern
Bucida buceras	gregory wood
Bumelia celastrina	bumelia, coastal
Bumelia lycioides	bumelia, buckthorn
Bumelia reclinata	bumelia
Campanula americana	bellflower, American
Canna x generalis	garden canna
Carphephorus odoratissimus	vanilla plant
Carphephorus paniculatus	deer-tongue
Casuarina spp.	casuarina
Cayaponia quinqueloba	cyaponia, five-lobe
Cestrum diurnum	day jessamine
Chasmanthium latifolium	spangle grass
Chasmanthium sessiliflorum	longleaf Chasmanthium
Chiococca spp.	snowberry
Colubrina asiatica	snakewood, Asian
Conoclinium coelestinum	mistflower
Coreopsis tripteris	tickseed, tall
Cupaniopsis anacardioides	carrotwood
Cyperus cuspidatus	flatsedge, coastal-plain
Cyperus giganteus	flatsedge
Cyperus globulosus	flatsedge, baldwin

Cyperus huarmensis	flatsedge, black knotty-root
Cyperus metzii	flatsedge
Cyperus retrorsus	flatsedge
Cyperus rotundus	flatsedge, purple
Cypselea humifusa	panal
Cyrilla racemiflora	cyrilla, swamp
Dichondra caroliniensis	pony-foot
Digitaria serotina	crabgrass, dwarf
Diospyros virginiana	persimmon, common
Drymaria cordata	West Indian chickweed
Elytraria caroliniensis	scaly-stem, Carolina
Eragrostis spp.	lovegrass
Erechites hieraciifolia	fireweed
Erigeron quercifolius	fleabane
Erithralis fruticosa	black torchwood
Eryngium baldwini	coyote-thistle, Baldwin's
Eupatorium spp.	thoroughworts
except E. leptophyllum	thoroughwort, secund(OBL)
E. leucolepis	thoroughwort, white-bract(FACW)
E. mikanioides	thoroughwort semaphore(FACW)
E. perfoliatum	boneset, common(FACW)
Eustachys petracea	finger grass
Euthamia spp.	bushy goldenrod
Ficus aurea	fig, Florida strangler
Fimbristylis spathacea	hurricane-grass
Flaveria bidentis	yellowtop
Flaveria trinervia	yellowtop
Forestiera segregata	privet, Florida
Gaylussacia dumosa	dwarf huckleberry
Gaylussacia frondosa	dangleberry
Gratiola hispida	hyssop, hispid
Helenium amarum	sneezeweed, pasture
Helianthus floridanus	sunflower, Florida
Heliotropium curassavicum	heliotrope, seaside
Heliotropium polyphyllum	heliotrope
Hibiscus tiliaceus	rosemallow, sea
Hypericum hypericoides	St. Andrew's cross
Ilex opaca var. opaca	American holly
Ilex vomitoria	yaupon holly

Jacquinia keyensis	Joewood
Juncus tenuis	rush, path
Kosteletzkya pentasperma	mallow, coastal
Lachnanthes caroliniana	redroot
Leptochloa virgata	sprangle-top, tropic
Liatris gracilis	blazing star
Liatris spicata	gayfeather, spiked
Lilium catesbaei	lily, southern red
Lindernia crustacea	false-pimpernel, Malayan
Linum floridanum	flax, Florida yellow
Linum medium	flax, stiff yellow
Lyonia ligustrina	maleberry
Manisuris cylindrica	joint grass, pitted
Maytenus phyllanthoides	Florida mayten
Melaleuca quinquenervia	punk tree
Melochia corchorifolia	chocolate-weed
Metopium toxiferum	poison wood
Mimosa pigra	mimosa, black
Morus rubra	mulberry, red
Muhlenbergia expansa	cutover muhly
Murdannia spp.	dewflower
Myosurus minimus	mouse-tail, tiny
Myrica cerifera	bayberry, southern
Myrsine guianensis	myrsine, guiana
Nephrolepis spp.	sword ferns
Neyraudia reynaudiana	reed, silk
Oplismenus setarius	grass, woods
Oryza sativa	rice, cultivated
Panicum anceps	panicum, beaked
Panicum commutatum (Hall)	panicum
Panicum hians	panicum, gaping
Panicum strigosum	panicum
Panicum tenue	panicum
Parietaria spp.	pellitory
Paspalum conjugatum	paspalum, sour
Paspalum dilatatum	dallisgrass
Paspalum fimbriatum	paspalum, Panama
Paspalum plicatulum	paspalum, brown-seed
Paspalum setaceum	paspalum, thin
Paspalum urvillei	grass, vasey
Pennisetum purpureum	elephant ear grass
Phyla spp.	frog-fruit

Phyllanthus urinaria	leaf-flower, water
Piriqueta caroliniana	piriqueta
Polypogon spp.	grass, rabbit-foot
Polypremium procumbens	rustweed
Psidium cattleianun	guava, strawberry
Psychotria spp.	wild coffee
Rhodomyrtus tomentosus	downy rose myrtle
Rubus spp.	blackberries
Ruellia caroliniensis	wild petunia
Sabal palmetto	palm, cabbage
Sacciolepis indica	grass, glenwood
Sambucus canadensis	elderberry
Sapium sebiferum	tallow-tree, Chinese
Schinus terebinthifolius	pepper-tree, Brazilian
Schizachyrium spp.	bluestem
Scoparia dulcis	sweet broom
Scutellaria floridana	skullcap
Scutellaria integrifolia	rough skullcap
Sebastiana fruticosa	sebastian-bush, gulf
Sesbania spp.	rattle-bush
Setaria geniculata	grass, bristle
Seymeria cassiodes	black senna
Solidago rugosa	golden-rod, wrinkled
Stillingia sylvatica var. tenuis	queen's-delight, marsh
Suriana maritima	bay-cedar
Syzygium spp.	Java plum
Thespesia populnea	seaside mahoe
Tradescantia fluminensis	trailing spiderwort
Trema spp.	trema
Tripsacum dactyloides	grass, eastern gama
Vaccinium elliottii	blueberry, Elliott
Verbesina virginica	crownbeard, white
Wedelia trilobata	creeping ox-eye

Within Monroe County and the Key Largo portion of Dade County only, the following species shall be listed as Facultative:

Alternanthera paronychioides	smooth chaff-flower
Byrsonima lucida	locust-berry
Ernodea littoralis	golden creeper
Guapira discolor	blolly

Manilkara bahamensis	wild dilly
Pisonia rotundata	pisonia
Pithecellobium keyensis	blackbead
Pithecellobium unguis-cati	catsclaw
Randia aculeata	box briar
Reynosia septentrionalis	darling plum
Thrinax radiata	Florida thatch palm

(4) Nomenclature. Use of plants in this rule is based solely on the scientific names. Common names are included in the above lists for information purposes only. The following references shall be used by the regulating agency to resolve any uncertainty about the nomenclature or taxonomy of any plant listed by a given scientific name in this section: R. Godfrey, Trees, Shrubs and Woody Vines of Northern Florida and Adjacent Georgia & Alabama (Univ. Ga. Press, Athens 1988) and D. Lellinger, Ferns & Fern-Allies of the United States & Canada (Smithsonian Institution Press, Washington D.C. 1985) for all species covered by these references. For all other listed scientific names the following references will be followed unless the species list in this section designates a different authority next to an individual species name: R. Godfrey & J. Wooten, Aquatic and Wetland Plants of Southeastern United States: Monocotyledons (Univ. Ga. Press, Athens 1979); R. Godfrey & J. Wooten, Aquatic and Wetland Plants of Southeastern United States: Dicotyledons (Univ. Ga. Press, Athens 1979); D. & H. Correll, Flora of the Bahama Archipelago (A.R. Gantner, Germany 1982). When the species list in this section designates a different authority next to an individual species name, the regulating agency shall resolve any ambiguity in nomenclature by using the name identified in D. Hall, The Grasses of Florida (Doctoral Dissertation, Univ. of Fla., Gainesville 1978); or C. Campbell, Systematics of the Andropogon Virginicus Complex (GRAMINEAE), 64 Journal of the Arnold Arboretum 171-254 (1983).
Specific Authority: 373.421, F.S.
Law Implemented: 373.019, 373.421, F.S.
History: New 7-1-94, Formerly 17-340.450.

62-340.500 Hydrologic Indicators.
The indicators below may be used as evidence of inundation or saturation when used as provided in section 62-340.300, F.A.C. Several of the indicators reflect a specific water elevation. These specific water elevation indicators are intended to be evaluated with meteorological information, surrounding topography and reliable hydrologic data or analyses when provided, to ensure that such indicators reflect inundation or saturation of a frequency and duration sufficient to meet the wetland definition in subsection 62-340.200(19), F.A.C., and not rare or aberrant events. These specific water elevation indicators are not intended to be extended from the site of the indicator into surrounding

areas when reasonable scientific judgment indicates that the surrounding areas are not wetlands as defined in subsection 62-340.200(19), F.A.C.

(1) Algal mats. The presence or remains of nonvascular plant material which develops during periods of inundation and persists after the surface water has receded.

(2) Aquatic mosses or liverworts on trees or substrates. The presence of those species of mosses or liverworts tolerant of or dependent on surface water inundation.

(3) Aquatic plants. Defined in subsection 62-340.200(1), F.A.C.

(4) Aufwuchs. The presence or remains of the assemblage of sessile, attached or free-living, nonvascular plants and invertebrate animals (including protozoans) which develop a community on inundated surfaces.

(5) Drift lines and rafted debris. Vegetation, litter, and other natural or manmade material deposited in discrete lines or locations on the ground or against fixed objects, or entangled above the ground within or on fixed objects in a form and manner which indicates that the material was waterborne. This indicator should be used with caution to ensure that the drift lines or rafted debris represent usual and recurring events typical of inundation or saturation at a frequency and duration sufficient to meet the wetland definition of subsection 62-340.200(19), F.A.C.

(6) Elevated lichen lines. A distinct line, typically on trees, formed by the water-induced limitation on the growth of lichens.

(7) Evidence of aquatic fauna. The presence or indications of the presence of animals which spend all or portions of their life cycle in water. Only those life stages which depend on being in or on water for daily survival are included in this indicator.

(8) Hydrologic data. Reports, measurements, or direct observation of inundation or saturation which support the presence of water to an extent consistent with the provisions of the definition of wetlands and the criteria within this rule, including evidence of a seasonal high water table at or above the surface according to methodologies set forth in Soil and Water Relationships of Florida's Ecological Communities (Florida Soil Conservation Staff 1992).

(9) Morphological plant adaptations. Specialized structures or tissues produced by certain plants in response to inundation or saturation which normally are not observed when the plant has not been subject to conditions of inundation or saturation.

(10) Secondary flow channels. Discrete and obvious natural pathways of water flow landward of the primary bank of a stream watercourse and typically parallel to the main channel.

(11) Sediment deposition. Mineral or organic matter deposited in or shifted to positions indicating water transport.

(12) Vegetated tussocks or hummocks. Areas where vegetation is elevated above the natural grade on a mound built up of plant debris, roots, and soils so that the growing vegetation is not subject to the prolonged effects of soil anoxia.

(13) Water marks. A distinct line created on fixed objects, including vegetation, by a sustained water elevation.
Specific Authority: 373.421, F.S.
Law Implemented: 373.019, 373.421, F.S.
History: New 7-1-94, Formerly 17-340.500.

62-340.550 Wetland Hydrology.
A wetland delineation using the methodology described above, can be refuted by either reliable hydrologic records or site specific hydrologic data which indicate that neither inundation for at least seven consecutive days, nor saturation for at least twenty consecutive days, occurs during conditions which represent long-term hydrologic conditions. Hydrologic records or site specific hydrologic data must be of such a duration, frequency, and accuracy to demonstrate that the records or data are representative of the long-term hydrologic conditions, including the variability in quantity and seasonality of rainfall. When sufficient amounts of either reliable hydrologic records or site specific hydrologic data are not available to prove that the wetland area of concern does not inundate or saturate as described above, a site-specific field-verified analytic or numerical model may be used to demonstrate that the wetland area no longer inundates or saturates regularly or periodically under typical long-term hydrologic conditions. Before initiating the use of a model to evaluate if a wetland delineation should be refuted based on hydrologic conditions, the applicant or petitioner shall first meet with the appropriate regulating agency and reach an agreement on the terms of study, including data collection, the specific model, model development and calibration, and model verification. If the data, analyses, or models are deemed inadequate based on the hydrologic conditions being addressed, the regulating agency shall provide a case-by-case review of the applicability of any data, analyses, or models and shall provide specific reasons, based on generally accepted scientific and engineering practices, why they are inadequate.
Specific Authority: 373.421, F.S.
Law Implemented: 373.019, 373.421, F.S.
History: New 7-1-94, Formerly 17-340.550.

62-340.600 Surface Waters.
(1) For the purposes of section 373.421, F.S., surface waters are waters on the surface of the earth, contained in bounds created naturally or artificially, including, the Atlantic Ocean, the Gulf of Mexico, bays, bayous, sounds, estuaries, lagoons, lakes, ponds, impoundments, rivers, streams, springs, creeks, branches, sloughs, tributaries, and other watercourses. However, state water quality standards apply only to those waters defined in subsection 403.031(13), F.S.
(2) The landward extent of a surface water in the State for the purposes of implementing Section 373.414, F.S., shall be the more landward of the following:
(a) wetlands as located by section 62-340.300, F.A.C., of this chapter;

(b) the mean high water line elevation for tidal water bodies;
(c) the ordinary high water line for non-tidal natural water bodies;
(d) the top of the bank for artificial lakes, borrow pits, canals, ditches and other artificial water bodies with side slopes of 1 foot vertical to 4 feet horizontal or steeper, excluding spoil banks when the canals and ditches have resulted from excavation into the ground; or
(e) the seasonal high water line for artificial lakes, borrow pits, canals, ditches, and other artificial water bodies with side slopes flatter than 1 foot vertical to 4 feet horizontal along with any artificial water body created by diking or impoundment above the ground.
(3) Determinations made pursuant to paragraphs (2)(b) and (2)(c) shall be for regulatory purposes and are not intended to be a delineation of the boundaries of lands for the purposes of title.
Specific Authority: 373.421, F.S.
Law Implemented: 373.019, 373.421, 403.031(13), F.S.
History: New 7-1-94, Formerly 17-340.600.

62-340.700 Exemptions for Treatment or Disposal Systems.
(1) Alteration and maintenance of the following shall be exempt from the rules adopted by the department and the water management districts to implement subsections 373.414(1) through 373.414(6), 373.414(8) and 373.414(10), F.S.; and subsection 373.414(7), F.S., regarding any authority to apply state water quality standards within any works, impoundments, reservoirs, and other watercourses described in this subsection and any authority granted pursuant to section 373.414, F.S. (1991):
(a) Works, impoundments, reservoirs, and other watercourses constructed and operated solely for wastewater treatment or disposal in accordance with a valid permit reviewed or issued under sections 62-28.700, 62-302.520, F.A.C., Chapters 62-17, 62-600, 62-610, 62-640, 62-650, 62-660, 62-670, 62-671, 62-673, or 62-701, F.A.C., or section 403.0885, F.S., or rules implementing section 403.0885, F.S., except for treatment wetlands or receiving wetlands permitted to receive wastewater pursuant to Chapter 62-611, F.A.C., or section 403.0885, F.S., or its implementing rules;
(b) Works, impoundments, reservoirs, and other watercourses constructed solely for wastewater treatment or disposal before a construction permit was required under Chapter 403, F.S., and operated solely for wastewater treatment or disposal in accordance with a valid permit reviewed or issued under sections 62-28.700, 62-302.520, F.A.C., Chapters 62-17, 62-600, 62-610, 62-640, 62-650, 62-660, 62-670, 62-671, 62-673, or 62-701, F.A.C., or section 403.0885, F.S., or rules implementing section 403.0885, F.S., except for treatment wetlands or receiving wetlands permitted to receive wastewater pursuant to Chapter 62-611, F.A.C., or section 403.0885, F.S., or its implementing rules;

(c) Works, impoundments, reservoirs, and other watercourses of less than 0.5 acres in combined area on a project-wide basis, constructed and operated solely for stormwater treatment in accordance with a noticed exemption under chapter 62-25, F.A.C., or a valid permit issued under chapters 62-25 (excluding rule 62-25.042), 62-330, 40B-4, 40C-4, 40C-42 (excluding rule 40C-42.0265), 40C-44, 40D-4, 40D-40, 40D-45, or 40E-4, F.A.C., except those permitted as wetland stormwater treatment systems; or

(d) Works, impoundments, reservoirs, and other watercourses of less than 0.5 acres in combined area on a project-wide basis, constructed and operated solely for stormwater treatment before a permit was required under chapters 62-25, 40B-4, 40C-4, 40C-42, 40C-44, 40D-4, 40D-40, 40D-45, or 40E-4, F.A.C.

(2) Alteration and maintenance of the following shall be exempt from the rules adopted by the department and the water management districts to implement subsections 373.414(1), 373.414(2)(a), 373.414(8), and 373.414(10), F.S.; and subsections 373.414(3) through 373.414(6), F.S.; and subsection 373.414(7), F.S., regarding any authority to apply state water quality standards within any works, impoundments, reservoirs, and other watercourses described in this subsection and any authority granted pursuant to section 373.414, F.S. (1991), except for authority to protect threatened and endangered species in isolated wetlands:

(a) Works, impoundments, reservoirs, and other watercourses of 0.5 acre or greater in combined area on a project-wide basis, constructed and operated solely for stormwater treatment in accordance with a noticed exemption under chapter 62-25, F.A.C., or a valid permit issued under chapters 62-25 (excluding rule 62-25.042), 62-330, 40B-4, 40C-4, 40C-42 (excluding rule 40C-42.0265), 40C-44, 40D-4, 40D-40, 40D-45, 40E-4, except those permitted as wetland stormwater treatment systems; or

(b) Works, impoundments, reservoirs, and other watercourses of 0.5 acres or greater in combined area on a project-wide basis, constructed and operated solely for stormwater treatment before a permit was required under chapters 62-25, 40B-4, 40C-4, 40C-42, 40C-44, 40D-4, 40D-40, 40D-45, or 40E-4, F.A.C.

(3) The exemptions in subsections 62-340.700(1) and (2) shall not apply to works, impoundments, reservoirs or other watercourses that

(a) are currently wetlands which existed before construction of the stormwater treatment system and were incorporated in it;

(b) are proposed to be altered through expansion into wetlands or other surface waters; or

(c) are wetlands created, enhanced, or restored as mitigation for wetland or surface water impacts under a permit issued by the Department or a water management district.

(4) Alterations and maintenance of works, impoundments, reservoirs, and other watercourses exempt under this subsection shall not be considered in determining whether any wetland permitting threshold is met or exceeded under part IV of chapter 373, F.S.

Effective 7-1-94

(5) Works, impoundments, reservoirs, and other watercourses exempt under this subsection, other than isolated wetlands in systems described in subsection 62-340.700(2) above, shall not be delineated under section 373.421, F.S.

(6) This exemption shall not affect the application of state water quality standards, including those applicable to Outstanding Florida Waters, at the point of discharge to waters as defined in subsection 403.031(13), F.S.

(7) As used in this subsection, "solely for " means the reason for which a work, impoundment, reservoir, or other watercourse is constructed and operated; and such construction and operation would not have occurred but for the purposes identified in subsections 62-340.700(1) or subsection 62-340.700(2), F.A.C. Furthermore, the phrase does not refer to a work, impoundment, reservoir, or other watercourse constructed or operated for multiple purposes. Incidental uses, such as occasional recreational uses, will not render the exemption inapplicable, so long as the incidental uses are not part of the original planned purpose of the work, impoundment, reservoir, or other watercourse. However, for those works, impoundments, reservoirs, or other watercourses described in paragraphs 62-340.700(1)(c) and 62-340.700(2)(a), F.A.C., use of the system for flood attenuation, whether originally planned or unplanned, shall be considered an incidental use, so long as the works, impoundments, reservoirs, and other watercourses are no more than 2 acres larger than the minimum area required to comply with the stormwater treatment requirements of the district or department. For the purposes of this subsection, reuse from a work, impoundment, reservoir, or other watercourse is part of treatment or disposal.

Specific Authority: 373.414(9), F.S.
Law Implemented: 373.414(9), F.S.
History: New 7-1-94, Formerly 17-340.700.

62-340.750 Exemption for Surface Waters or Wetlands Created By Mosquito Control Activities.

Construction, alteration, operation, maintenance, removal, and abandonment of stormwater management systems, dams, impoundments, reservoirs, appurtenant works, or works, in, on or over lands that have become surface waters or wetlands solely because of mosquito control activities undertaken as part of a governmental mosquito control program, and which lands were neither surface waters nor wetlands before such activities, shall be exempt from the rules adopted by the department and water management districts to implement subsections 373.414(1) through 373.414(6), 373.414(8), and 373.414(10), F.S.; and subsection 373.414(7), F.S., regarding any authority granted pursuant to section 373.414, F.S. (1991). Activities exempted under this section shall not be considered in determining whether any wetland permitting threshold is met or exceeded under part IV of chapter 373, F.S. This exemption shall not affect the regulation of impacts on other surface waters or wetlands, or the application of state water quality standards to waters as defined in subsection 403.031(13), F.S. including standards applicable to Outstanding Florida Waters.

Effective 7-1-94

Specific Authority: 373.414(9), F.S.
Law Implemented: 373.414(9), F.S.
History: New 7-1-94, Formerly 17-340.750.